

09.01.00.

1D-0027



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276

RENEE CIPRIANO, DIRECTOR

(217) 557-8155
(FAX) 782-3258

April 5, 2002

Department of the Navy
SOUTHNAVFACENGCOM
c/o Anthony Robinson
Mail Code 18511
2155 Eagle Drive
Post Office Box 190010
North Charleston, South Carolina 29419-9010

Re: Comments and discussion regarding
Meeting Minutes and Presentation of March 28, 2002 0971255048 – Lake County
Naval Training Center Great Lakes
Superfund/Technical Reports

Dear Mr. Robinson:

The Illinois Environmental Protection Agency (Illinois EPA or Agency) is in receipt of the Draft Meeting Minutes for the March 28, 2002 meeting held at Great Lakes NTC. The minutes were received via electronic mail on April 3, 2002. The Agency has reviewed this document and the presentation material distributed during the meeting and has the following comments:

Presentation Comments

- 1) Ecological Risk Assessment, Slide 7 – The mink should be considered as the piscivorous mammal. The portion of fish in the mink diet is high and the mink is especially susceptible to the effects of PCBs. From previous visits to the site, mink would be expected as long as adequate denning sites are available.
- 2) Ecological Risk Assessment, Slide 13 – As discussed, the sediment screening ERL values in the USEPA Ecotox Thresholds (USEPA, 1996) Table 2 are based on marine sediments and are inappropriate for use in Lake Michigan. These are the same data presented in the Long and McDonald, 1995 reference that is also inappropriate. Illinois EPA was mistaken when we indicated that we discourage the use of any of the National Oceanic and Atmospheric Administration (NOAA) sediment values including the Long and Morgan, 1990 ERs. This is incorrect as evidenced by their use in our own sediment remediation objectives guidance. Please excuse the confusion on this.

GEORGE H. RYAN, GOVERNOR

- 3) Ecological Risk Assessment, Slide 25 – The second bullet in this slide is confusing. No scaling factors are recommended for either the kingfisher or the raccoon. The test animal mg/kg dose should be applied directly to the risk assessment receptor, bird or mammal.
- 4) Ecological Risk Assessment, Slide 25 – The fourth bullet requires some clarification. The raccoon diet is assumed to be 50% fish and 50% invertebrates. Is the invertebrate portion comprised of aquatic invertebrates? If soil invertebrates, are they assumed to be contaminated?
- 5) Ecological Risk Assessment, Slide 27 – Use of the term “average” to describe the LOAEL-based risk evaluations is misleading. The two methods of evaluation would be best described as NOAEL-based and LOAEL-based. This assumes that the TRVs are the only differences between the evaluations.
- 6) Human Health Risk Assessment, Slide 6 – It is unclear what the assumed surface water activities are for this site. Four hour events two times a week for six months a year might correspond to children playing in the stream but it's difficult to imagine adult activities. Plus, 50 ml/day surface water ingestion could include swimming activities, but it is unlikely children or adults would indulge in immersed water play for four hours per event. These assumptions need further clarification.
- 7) Human Health Risk Assessment, Slide 7 – Illinois EPA located the reasonable maximum fish ingestion value of 25 grams/day in the USEPA Exposure Factors Handbook reference. He talked with the Illinois Fish Contaminant Program chairman regarding an acceptable fish ingestion assumption. That program assumes 20 grams/day as the basis for issuing fish advisories for the state, which would also be acceptable as a reasonable maximum exposure (RME) assumption for this project.
- 8) Human Health Risk Assessment, Slide 14 – It is unclear what the relevance of the Region 3 risk-based fish contaminant levels are to this evaluation. If, as the slide text suggests, the modeled GLNTC fish tissue levels were compared to the Region 3 screening values, then no independent fish ingestion assumption is needed. The Region 3 fish values incorporate a fish ingestion assumption (54 grams/day). If this comparison was done, then how were the hazard indices (HIs) and incremental lifetime cancer risks (ILCRs) calculated?
- 9) Human Health Risk Assessment, Slide 20 – This slide presents the hazard and risk results from the fish ingestion pathway. The major contributors to toxicity are also listed. Polynuclear aromatic hydrocarbons (PAHs) and arsenic should not be included in this pathway. Fish are able to metabolize low to moderate amounts of PAHs such that concentrations do not accumulate significantly. Fish are also able to metabolize arsenic, plus any that remains in the fish will be in a nontoxic form. Details regarding fish tissue

modeling such as lipid concentration should be submitted. As mentioned during discussions, sediment fraction organic carbon (FOC) and contaminant levels combine to impact the results of the fish tissue concentration model. Summarizing these factors before running the model may be inappropriate.

Minutes Comments

- 10) Section 5.1 – This should state that it was decided to use the mink as the piscivorous mammal.
- 11) Next Meeting – Illinois EPA is willing to attend the next meeting in South Carolina. However, several issues need to be looked into due to it requiring out of state travel. First, Illinois EPA will need a letter from the Navy (Anthony) requesting Illinois EPA's attendance at the meeting with an explanation of why it is being held there, rather than on-site. Second, Illinois EPA needs to determine that adequate funding still remains in the current DSMOA/CA budget for this site. (A suggestion would be for the Navy to pay for the travel expenses directly rather than having Illinois EPA charge it to the DSMOA/CA account.) (In the event this suggested method is chosen, Illinois EPA will provide details on how to accomplish this.) Provided funding is available, and Agency management approves the travel, Illinois EPA personnel could attend. The Agency would expect that both RIs would have been completed and submitted prior to the meeting date. In addition, it is assumed that both Les Morrow and Brian Conrath would be attending this meeting.

If you have any questions regarding this correspondence, you may contact me at 217/557-8155.

Sincerely,

Brian A. Conrath

Brian A. Conrath
Remedial Project Manager
Federal Facilities Unit
Federal Site Remediation Section
Bureau of Land

BAC: [signature] H:\glntc\020404AR.1.ET

cc: Bob Davis, Tetra Tech NUS